## **CLAIMS**

## What is claimed is:

- 1 1. A handheld computing device comprising:
- 2 a housing;
- 3 a display mounted on the housing; and
- an antenna located on the display.
- 1 2. The device of claim 1 wherein the antenna is etched on the display.
- 1 3. The device of claim 1 wherein the antenna is sputter etched on the display.
- 1 4. The device of claim 1 wherein the antenna is embedded under the display.
- 1 5. The device of claim 1 further comprising an amplification circuit coupled
- 2 to the antenna.
- 1 6. The device of claim 5 wherein the amplification circuit is mounted on the
- 2 display.
- 7. The device of claim 6 wherein the amplification circuit is mounted on the
- 2 display using chip on glass technology.
- 1 8. The device of claim 1 wherein the antenna is a center-fed dipole antenna.
- 1 9. The device of claim 1 wherein the antenna is an end-fed dipole antenna.
- 1 10. The device of claim 1 wherein the handheld computing device is a
- 2 personal computer (PC) tablet.
- 1 11. The device of claim 1 wherein the handheld computing device is a

- 2 personal digital assistant (PDA).
- 1 12. A method comprising, mounting an antenna on a display of a computing
- 2 apparatus.
- 1 13. The method of claim 12 wherein mounting the antenna further comprises
- 2 etching the antenna on the display.
- 1 14. The method of claim 12 wherein mounting the antenna further comprises
- 2 sputter etching the antenna on the on the display.
- 1 15. The method of claim 12 wherein mounting the antenna further comprises
- 2 embedding under the display.
- 1 16. The method of claim 1 further comprising coupling an amplification
- 2 circuit to the antenna.
- 1 17. The method of claim 16 wherein coupling the amplification circuit to the
- 2 antenna further comprises mounting the amplification circuit on the display.
- 1 18. The method of claim 17 wherein the amplification circuit is mounted on
- 2 the display using chip on glass technology.
- 1 19. The method of claim 12 wherein the computing apparatus is a personal
- 2 computer (PC) tablet.
- 1 20. The method of claim 12 wherein the computing apparatus is a personal
- 2 digital assistant (PDA).
- 1 21. A handheld computing device comprising:
- 2 a display;
- a radio frequency (RF) transceiver mounted on the display; and

- an antenna, coupled to the RF transceiver, mounted on the display.
- 1 22. The device of claim 21 further comprising a network controller coupled to
- 2 the RF transceiver.
- 1 23. The device of claim 22 wherein the network controller further comprises:
- 2 media access layer (MAC) digital signal processor (DSP); and
- a baseband DSP coupled to the MAC DSP.
- 1 24. The device of claim 23 wherein the baseband DSP comprises:
- 2 a baseband state machine;
- a coding element coupled to the baseband state machine; and
- 4 a modulation element coupled to the coding.
- 1 25. The device of claim 24 wherein the baseband DSP further comprises:
- a digital to analog converter (DAC) DSP coupled to the baseband DSP;
- 3 and
- an analog to digital converter (ADC) DSP coupled to the baseband DSP.
- 1 26. The device of claim 21 wherein the handheld computing device is a
- 2 personal computer (PC) tablet.
- 1 27. The device of claim 21 wherein the handheld computing device is a
- 2 personal digital assistant (PDA).